

WP 08-PT.01
Revision 5

Standard Waste Box Handling and Operation Manual

Cognizant Department: Transportation Project

Approved by: Phil Gregory



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1.0 SCOPE ^{1, 2, 3}

This document outlines the recommended procedures for a user's receipt, pre-use inspection, and operation of a Standard Waste Box (SWB).

2.0 GENERAL DESCRIPTION

The SWB was designed for use either with the TRUPACT-II or HalfPACT, or as a stand-alone U.S. Department of Transportation (DOT) Type A packaging. The maximum gross shipping weight of a filled SWB is 4,000 lb.

The SWB is a rectangular container having convex ends. It also has a bottom and a bolted lid closure. Two bumpers are welded to the curved ends of the box. The box has a flange and forty-two threaded rivet inserts. The lid has a flange welded around the perimeter. A ½-in. thick rubber gasket is used to seal the lid to the box. Internal gas pressure is relieved by one to four filters. The filters are installed in pipe thread tapped ports in the upper edge of the oblong body.

The materials and processes used for the SWB are typical in the fabrication industry. The only exception is the use of a unique threaded rivet and the specialized tools required for installation.

The SWB was designed to hold drums or loose homogeneous materials. Allowed payloads are as follows:

- Material Form No. 1: Solids - any particle size.
- Material Form No. 2: Solids - large particle size only (i.e., sand, concrete, debris, soil, etc.).
- Material Form No. 3: Solids - objects with no significant dispersible or removable contamination (see 49 CFR §173.443, Section 3.1).
- Material Form No. 4: Solids as described in Form 3 above, including large bulky, dense objects with sharp and obtrusive members or components, but having Form 1 and/or 2 as dispersible contaminants associated with the material (e.g., steel plates, motors, valves, steel pipes, concrete blocks, etc.).
- Material Form No. 5: Drums cannot exceed 1,000 lb per drum. The drums, other packagings in any arrangement, or other large bulky objects(s) with dunnage must be within gross weight limitations.

For heavy, bulky materials (e.g., concrete chunks, motors and pumps), equipment or materials with sharp corners or protrusions, or material/equipment geometries that could result in highly localized forces, the shipper must ensure that the contents are securely fastened/positioned within the package.

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When the SWB is used as a stand-alone Type A packaging, the user shall comply with the requirements and limits stated in Section 3.1.

When the SWB is shipped in the TRUPACT-II or HalfPACT to the Waste Isolation Pilot Plant (WIPP), the user shall comply with the requirements stated in the documents referenced in Section 3.1 and Section 3.3.

When the SWB is shipped in the TRUPACT-II or HalfPACT to a place other than WIPP, the user shall comply with the requirements stated in Section 3.1, and the first and second bullets of Section 3.3.

3.0 REFERENCE DOCUMENTS

3.1 U.S. DOT 7A Compliance Documents

- Title 49 *Code of Federal Regulations* (CFR) §173.443, "Contamination Control"
- 49 CFR §173.412, "Additional Design Requirements for Type A Packages"
- 49 CFR §173.474, "Quality Control for Construction of Packaging"
- 49 CFR §178.350, "Specification 7A; General Packaging, Type A"
- DOE/RL-96-57 (Volumes 1 and 2), *Test and Evaluation Document for the U.S. Department of Transportation Specification 7A TYPE A Packaging*

3.2 Washington TRU Solutions/WIPP Construction Drawings and Specifications

- 165-F-001, Standard Waste Box Assembly
- 165-L-010-W, Adjustable Lifting Sling for the Standard Waste Box
- 412-N-003, SWB Lift Fixture Adapter
- 412-N-004, Standard Waste Box Forklift Fixture Rack
- E-I-343, Specification for Fabrication of the Standard Waste Box

3.3 WIPP Shipment Compliance Documents

- NRC-Docket-71-9218, TRUPACT-II Certificate of Compliance for Radioactive Materials Packages
- NRC-Docket-71-9279, HalfPACT Certificate of Compliance for Radioactive Materials Packages

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- DOE/WIPP-02-3122, *Contact-Handled Transuranic Waste Acceptance Criteria (WAC) for the Waste Isolation Pilot Plant*
- [Minimum Filter Vent Specifications - Contact-Handled Transuranic Waste Authorized Methods for Payload Control \(CH-TRAMPAC\), Section 2.5](#) ⁴
- Payload Configurations - Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC), Section 2.9.8.

4.0 SAFETY PRECAUTIONS

4.1 General Safety Precautions

Only allowed DOT 7A payloads are to be transported in SWBs when they are used as DOT 7A containers. During use and handling of the packaging, proper safety precautions **MUST** be observed. Precautions include, but are not limited, to the following:

- No structural modifications shall be made to the container.
- If hardware replacement is required, use hardware as specified on the assembly/manufacturing drawing and specification.
- When lifting and handling the container, the procedures and recommendations in this document shall be closely followed.
- All personnel must be cleared from the work area while the container packaging is being lifted or moved.
- Do **NOT** use the container to store, contain, or transport cargo other than the cargo for which the packaging was designed.
- Only qualified personnel shall be permitted to handle, rig, transport, or otherwise use the packaging. The user shall be responsible for deciding who is qualified per Section 3.3.
- Use only recommended, or Washington TRU Solutions (WTS) engineering approved, solvents for the removal of gasket adhesives, and ensure they are site-approved products. Follow the solvent manufacturer's health and safety guidelines for the use of their product, as well as all site-specific health and safety guidelines.

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4.2 Warnings

Detailed safety warnings are used to promote personnel safety and are denoted by the prefix **WARNING**. Such warning statements and procedures shall be followed. A **WARNING** means **FAILURE TO HEED SUCH PROCEDURES COULD RESULT IN SERIOUS PERSONNEL INJURY**.

4.3 Cautions

Cautions before a step are denoted by the prefix **CAUTION**. Cautions alert personnel that failure to comply with the caution **COULD RESULT IN DAMAGE TO CONTENTS OR PACKAGING**.

5.0 PRELOADING TOOLS, SUPPLIES, AND SPARE PARTS

5.1 Recommended Tools (Commercially Available)

- 5/16-in. long arm hex key
- 9/16-in. long arm hex key
- 5/16-in. hex bit drive socket
- 9/16-in. hex bit drive socket
- 6 or 12-point socket (for filter installation)
- Ratchet drive wrench
- Calibrated torque wrench
- Lineup bar (bull or drift pin) with about a 3/8-in. rounded point
- Rivet installation header tools (Options: C-722 Wrench Type Header, C-900 Model A Pneumatic-Hydraulic header, or C-362 Pneumatic-Hydraulic Header [Supplier: Bollhof RIVNUT™, Inc., Kendallville, IN])
- Swivel hoist ring for lid lift: 1/4-20 UNC X 0.29-in. (+/- .01-in.), available from Actek, 17181 Gale Avenue, Unit C, City of Industry, CA 91745, phone (800) 752-7229 or (626) 581-3424, part No. 46100, special ordered with 0.29-in. (+/- .01-in.) thread length; or from Reid Tool, 2256 Black Creek Road, Muskegon, MI 49444-2684, phone (800) 253-0412 or (231) 777-3951, catalog No. SHR-23050 or equivalent, special ordered with 0.29-in. (+/- .01-in.) thread length. (Note site rigging requirements when ordering.)

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5.2 Recommended Spare Parts (Available from Seller)

- Cap screws
- Gasket assemblies
- Pipe plugs
- Touch-up paint
- Rivets (also available from Bollhof RIVNUT™, Inc., Kendallville, IN, Part Number S50-3069)

5.3 Recommended Supplies (Commercially Available)

NOTE

Socket flat head cap screws (SFHCS) - A non locking, liquid, anaerobic, thread sealant is the preferred product type for sealing the ½-in. 13 UNC SFHCS. This product type provides the necessary seal while allowing the SFHCS to be removed if necessary. If the SFHCSs are **NOT** to be removed, a locking thread sealant is acceptable.

NOTE

Filter and pipe plug - For sealing the threads of the filter and pipe plug, a thread sealant tape or compound is recommended. However, a liquid anaerobic thread sealant is acceptable.

- Thread sealant

5.4 Recommended Approved Filters (Supplied by User or Shipper)

- [Minimum Filter Vent Specifications - Contact-Handled Transuranic Waste Authorized Methods for Payload Control \(CH-TRAMPAC\), Section 2.5](#) ⁴

6.0 HANDLING PREREQUISITES

6.1 Pre-Use Inspection

- 6.1.1 Ensure each serial numbered SWB is traceable to the seller's Certificate of Compliance (C of C) required by Specification E-I-343.
- 6.1.2 Inspect the SWB for any major damage (e.g, significant deformation, punctures, tears, etc.) which would render the SWB unuseable. If major damage is found, the user shall not use the SWB.
- 6.1.3 Ensure all assembly components are present: body assembly (1 each), lid assembly (1 each), gasket assembly (4 pieces), pipe plugs (2 each), and cap screws (42 each).

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6.2 Prerequisite Actions

- 6.2.1 Remove the SWB's lid using the instructions in Section 7.2.
- 6.2.2 Inspect the forty-two rivets for damaged threads, loose fit, etc.
- 6.2.3 If any rivets need adjustment or replacement, perform the following:
 - 6.2.3.1 If a rivet has minor thread deformation (e.g., burrs, cross thread, etc.), correct the thread deformation by running a ½-in. 13 UNC thread tap through the rivet.
 - 6.2.3.2 If a rivet is loose (rotates), perform **ONE** of the following actions:
 - Use a rivet header tool (see Section 5.1) to re-upset the rivet following the manufacturer's instructions and the specifications listed in Section 3.2.
 - Grind off the protruding head of the rivet (allowing the rivet body to fall in the SWB body tube frame) and use a rivet header tool (see Section 5.1) to install a spare rivet (see Section 5.2) following the manufacturer's instructions and the specifications listed in Section 3.2.
- 6.2.4 Install filters and pipe plugs using the instructions in Section 7.3.

7.0 HANDLING

Content load shall comply with the applicable requirements stated in Section 2.0.

7.1 Lifting

CAUTION

It is recommended that the lift fixture adaptor referenced in Section 3.2 be used to lift the SWB when lifting with a crane or hoist to avoid damage to packaging. This fixture is used with an Adjustable Center of Gravity Lift Fixture (ACGLF) to compensate for off-center loads.

The packaging is designed to be lifted by several methods:

- Crane/hoist with adjustable lifting slings
- SWB lift fixture adapter (Reference Section 3.2) coupled to the ACGLF
- A forklift with conventional forks
- A forklift with SWB adapter

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In all cases, the user shall be responsible for ensuring the method of lifting is fit and safe for the intended operation.

7.1.1 Crane/Hoist with Adjustable Lifting Slings

CAUTION

To avoid damage to packaging, when lifting two SWBs stacked, the lower SWB must be secured to the upper SWB with three slings rated at a minimum safe working load of 2,000 lb each, and with current inspection tags. (See Drawing 165-L-010-W.)

CAUTION

To avoid damage to packaging, slings and rigging arrangement shall be rated for a vertical lift of a minimum of the total load to be lifted (up to 8,000 lb for a stacked arrangement, with adjustments made if weight in the stack is not evenly distributed between the two SWBs). They shall also be tested for the maximum gross weight to be lifted. Three slings are needed.

- 7.1.1.1 To lift the packaging(s) using slings, use a sling rigging that has a flat J-hook on one end of the sling.
- 7.1.1.2 Verify the flat J-hook catches under **AND** secures onto the lift clips on the top edge of the packaging.
- 7.1.1.3 Secure the other end of each sling assembly to the lifting apparatus (e.g., hoist or crane hook).
- 7.1.1.4 Lift the packaging a few inches to ensure all rigging connections and/or attachments are satisfactory.

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WARNING

Before lifting the packaging to the transport height, the user must verify by a short test lift that all rigging and attachments are adequate. Failure to do so could cause serious personnel injury.

WARNING

While the packaging is off the ground, all personnel must be kept away from the work area near the packaging. Failure to do so could cause serious personnel injury.

CAUTION

User must **NOT** come to an abrupt stop while lowering the packaging to avoid damage to packaging.

7.1.1.5 After checking that all rigging is secure, lift the packaging gently to the required transport height. When lowering the packaging, do it gently.

7.1.2 SWB Lift Adapter/ACGLF

CAUTION

When lifting two stacked SWBs, the lower SWB must be secured to the upper SWB with three lifting straps to avoid damage to packaging. Each strap must be rated at a minimum safe working load of 2,000 lb, and have current inspection tags. (See Drawing 165-L-010-W.)

NOTE

The ACGLF operating manual contains specific instructions for lifting operations using the SWB Lift Adapter/ACGLF combination.

7.1.3 Forklifts

As an option, a forklift vehicle can be used to lift or move the packaging. A forklift can be used **IF** the packaging is on blocking that allows the forklift tines to be put under the unit. The forklift also may be equipped with a push-pull device to handle the SWB with a slip sheet.

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Forklifts shall be appropriately rated and tested for a minimum of the total gross weight of the package(s) at a 36-in. load center for lifting loaded SWBs.

7.1.3.1 To lift the packaging, place the forklift tines, or slip sheet support plate, under the packaging.

WARNING

Failure to ensure full lateral support of the packaging could cause packaging damage and/or personnel injury.

7.1.3.2 Lift the packaging just enough to ensure that the forklift can initiate a **BALANCED** lift.

- If the lift is not **BALANCED**, gently lower the packaging back on the blocking supports, and adjust the support as needed.

7.1.3.3 Repeat Sections 7.1.3.1 and 7.1.3.2 to achieve a **BALANCED** lift.

WARNING

Failure to ensure full lateral support of the packaging could cause packaging damage and/or personnel injury.

7.1.3.4 After achieving a **BALANCED** lift, tilt the mast gently toward the forklift cab, and lift the packaging to the desired transport height.

7.2 Lid Removal

7.2.1 Using a hexagon wrench, remove all cap screws, placing the cap screws where they will not be damaged or lost.

WARNING

Failure to ensure that the swivel hoist ring is properly installed in the lid lift nut could cause packaging damage and/or personnel injury.
Washers **MUST NOT** be installed on the swivel hoist ring bolt.

7.2.2 Insert a 1/4-20 UNC-2A X .29-in. long swivel hoist ring in the lid lift nut.

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- 7.2.3 Tighten the swivel hoist ring shoulder flush against the lid, ensuring that full thread engagement is achieved.
- | 7.2.4 Torque swivel hoist ring bolt as required by manufacturer.
- 7.2.5 Attach suitable rigging, capable of lifting 300 lb, to the swivel hoist ring.

WARNING

Pinch points are present between lid and body shell flange. Fingers must be kept clear to avoid injury.

- 7.2.6 Lift the lid carefully and slowly upward/off, and clear of the packaging body shell flange.

CAUTION

It is recommended that the lid be placed on suitable support blocking to prevent contact of the lid flange with the ground or floor. This will preclude damage to the edge of the lid that forms a gasket sealing surface.

CAUTION

User must **NOT** come to an abrupt stop while lowering the lid to prevent damage to packaging.

- 7.2.7 Set the lid in a place to avoid damage to the lid or the gasket seal.

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7.3 Installation of Vent Filters and Plugs

NOTE

If a rubber gasket is supplied with the filter, it can be removed at the user's option. The SWB relies on the mechanical interface of the pipe threads with a thread sealant to create a leak-tight joint.

NOTE

Up to four approved filters (see Section 5.4) may be installed in the SWB's four filter mounting locations.

7.3.1 Apply a thread sealant (see Section 5.3) to the filter body pipe threads; then insert the filter in the filter mounting location on the **OUTSIDE** and hand-tighten.

7.3.2 Torque the filters to 10 lb-ft (+/- 5 lb-ft).

7.3.3 Install pipe plugs in the remaining open filter mount locations, using a thread sealant (see Section 5.3), and torque to 10 lb-ft (+/- 5 lb-ft).

7.3.4 Remove all excess pipe plug sealants from the exterior and interior of the packaging.

7.4 Lid Installation

7.4.1 Wipe the gasket sealing surface of the body and lid to remove loose debris. Refer to Section 9.2.1.4 if the use of a solvent is necessary to obtain a clean surface.

NOTE

The gasket is supplied as four parts (two straight parts and two curved parts). The holes are pre-punched for installation on the body. Minor adjustments to gasket may be made if necessary by trimming excess material. Gaps up to 1/4-in. may be filled in accordance with 9.3.

7.4.2 Ensure gasket holes match body holes, and mitered ends fit together properly prior to installation.

7.4.3 Install the lid gasket (4 pieces) by removing the protective tape from the pressure-sensitive adhesive back.

7.4.3.1 Place each piece of the gasket assembly (adhesive-side down) on the corresponding body frame location.

7.4.3.2 Ensure the mitered gasket ends are interlocked.

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7.4.4 Find the lid lifting nut threaded hole in the center of the lid.

WARNING

Failure to ensure that the swivel hoist ring is properly installed in the lid lift nut could cause packaging damage and/or personnel injury. Washers **MUST NOT** be installed on the swivel hoist ring bolt.

7.4.5 Insert a 1/4-20 UNC-2A X .29-in. long swivel hoist ring in the lid lift nut.

7.4.6 Tighten the swivel hoist ring shoulder flush against the lid, ensuring that full thread engagement is achieved.

7.4.7 Torque swivel hoist ring bolt as required by manufacturer.

7.4.8 Attach suitable rigging, capable of lifting 300 lb, to the swivel hoist ring.

7.4.9 Lift the lid above the packaging and center the lid over the body shell flange.

WARNING

Pinch points are present between lid and body shell flange. Fingers must be kept clear to avoid injury.

7.4.10 Lower the lid slowly onto the body shell flange, ensuring the gasket is not damaged.

NOTE

All lid screw threads shall be coated with the thread sealant specified in Section 5.3 before installation.

When installing the lid screws, a lineup bar may be used to pull the lid in position with the body. Care must be taken not to damage the rivet threads. If the threads are damaged, repair is to be performed in accordance with Section 6.2.1.

7.4.11 Install the four corner screws.

7.4.12 Install the middle screws of the straight sides.

7.4.13 Install the middle screws of the curved ends.

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- 7.4.14 Install the remaining screws.
- 7.4.15 Initially torque all screws to 30 lb-ft (-0, +10 lb-ft).
- 7.4.16 Torque all screws to 50 lb-ft (-0, +10 lb-ft).
- 7.4.17 Remove the lid lift rigging and hoist ring installed in Sections 7.4.5 and 7.4.8.

NOTE

A tamper indicator seal is not required for shipments inside of a Type B container.

- 7.4.18 If the SWB is being used as a stand-alone Type A container, apply a tamper indicator seal or other device between the lid and body flanges as required by 49 CFR §173.412(a).

7.5 Securing Packaging to a Conveyance Vehicle

The SWB Packaging, when used as a stand-alone packaging, works well with most vehicles. The following steps describe how the packaging may be loaded and secured to a conveyance vehicle. The user shall be responsible for ensuring the equipment and methods are fit for the intended purpose and meet applicable DOT requirements for over-the-road transport.

- 7.5.1 Lift the packaging into position onto the conveyance vehicle according to Section 7.1.
- 7.5.2 Find and install wood, or other material, to prevent longitudinal or lateral movement of the packaging.

NOTE

The rigging must be anchored to the packaging by the lift clips at the top edge of the packaging.

- 7.5.3 Secure the packaging to the vehicle with webbing or other suitable rigging as described in Section 7.1.1.
- 7.5.4 Verify that all rigging and equipment is secure before shipment.

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8.0 PAYLOAD HANDLING/LOADING

The following steps shall be followed in loading the SWB with drums, or directly loading with materials. The lid removal of the SWB is done as stated in Section 7.2.

8.1 Drums

Up to four 55-gallon drums may be placed in an SWB, or other payload configurations, as authorized in the Contact-Handled Transuranic Waste Authorized Methods for Payload Control (CH-TRAMPAC), Section 2.9.8.

The remaining space of the SWB may be filled with either dunnage or materials specified in Section 2.0.

Reinstall the SWB lid as instructed in Section 7.4.

8.2 Direct Loading

The SWB may be directly loaded with materials specified in Section 2.0.

Reinstall the SWB lid as instructed in Section 7.4.

9.0 MAINTENANCE, INSPECTION AND REPAIR

Section 9.1 shall be done each time the SWB lid is installed. Section 9.2 gives instructions for the replacement of the lid sealing gasket. (Refer to Figure 1.)

9.1 Maintenance and Inspection

During the inspection of the packaging, if defective parts or components are found, they must be replaced using original specification materials and methods to maintain DOT 7A certification. In such cases, contact the manufacturer for replacements.

Inspect all lift clips and the lift nut in the lid for damage or signs of fatigue.

Replace the item(s) if such signs are found.

Contact the manufacturer for correct replacement procedures.

Inspect the lid closure cap screws for signs of fatigue or damage, and replace as needed.

Inspect the lid gasket. Replace it with a new gasket if the gasket is damaged or shows signs of deformation or deterioration. Before loading waste into container, either verify that the gasket shelf-life has not expired or replace gasket. (See Section 9.2.1.)

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- 9.1.4 Inspect the body shell flange gasket sealing surface for cleanliness, and clean if needed.
- 9.1.5 Inspect all carbon filters and pipe plugs for damage and adequacy of tightness.
 - 9.1.5.1 Torque all filters and plugs to 10 lb-ft (+/- 5 lb-ft).
- 9.1.6 Inspect all packaging interior and exterior surfaces for signs of damage or distortion.
 - 9.1.6.1 If damage is found that could affect the containment integrity of the packaging, contact the manufacturer for repair procedures.
- 9.1.7 Inspect all packaging interior and exterior surfaces for signs of corrosion.
 - 9.1.7.1 If signs of corrosion that could impair the containment are found, repair the corroded finish.
- 9.1.8 Inspect the condition of all sealant applied to the upper and lower corners where the bumper tubes rest against the shell side panels.
 - 9.1.8.1 If sealant removal and reapplication is required, clean the affected area and reapply sealant as needed.
- 9.1.9 Verify the packaging identification serial number is in place and in good condition.

9.2 Lid Flange Sealing Gasket

- 9.2.1 Lid Gasket Replacement
 - 9.2.1.1 Remove the lid according to Section 7.2.
 - 9.2.1.2 Remove the old gasket manually by stripping the gasket from the body flange.
 - 9.2.1.3 Clean the body flange gasket seating area as follows:
 - Remove any residual gasket components or adhesive, using a flexible spatula, putty knife, or similar tool.
 - 9.2.1.4 Apply a light coat of low-intensity cleaning solvent, such as denatured alcohol or a general purpose adhesive remover containing a near equal mixture of Naphtha and Xylene. (Adhesive remover of this type is commonly available at automotive parts stores). Use of acetone or other strong solvents is to be avoided as it will remove the paint/coating.

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NOTE

The spare gasket, with a removable protective tape covering the self-adhesive surface, is supplied as four parts (two straight parts and two curved parts). The holes are pre-punched for installation on the body. Minor adjustments to gasket may be made if necessary, by trimming excess material. Gaps up to 1/4-in. may be filled in accordance with Section 9.3.

- 9.2.1.5 Obtain a new gasket.
- 9.2.1.6 Ensure gasket holes match body holes, and mitered ends fit together properly prior to installation.
- 9.2.1.7 Install the lid gasket (4 pieces) as follows:
 - Remove the protective tape from the pressure-sensitive adhesive back.
 - Place each piece of the gasket assembly (adhesive-side down) on the corresponding body frame location, ensuring that the mitered gasket ends are interlocked.
- 9.2.1.8 Verify the gasket final installation to assure the gasket and lid sealing surfaces are clean and free of dirt, foreign particles, or other contaminants.

9.3 Lid Gasket Repair

The lid gasket may be repaired using an RTV silicone gasket maker material (recommend LOCTITE 598). The gasket maker material may also be used to fill gaps in the gasket material up to the manufacturers recommended gap, but not to exceed 1/4-in.

10.0 USER QUALITY ACCEPTANCE CRITERIA

If the requirements/criteria of Section 9.1 are **NOT** met, a Discrepancy Report (DR) shall be prepared and dispositioned per user's Quality Assurance procedures before next use of the packaging.

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Figure 1. SWB Isometric View

TYPE/LEVEL	QTY. REQD.	ITEM NO.	NAME/DESCRIPTION
ASM	1	1	STANDARD WASTE BOX ASSEMBLY
ASM	1	2	BODY ASSEMBLY
PRT	1	3	BODY PANEL, 10 GA.
ASM	1	4	BODY TUBE FRAME ASSEMBLY
PRT	2	5	BODY TUBE FRAME (STRAIGHT), 1-1/2 X 2 X 11 GA. STK
PRT	2	6	BODY TUBE FRAME (FORMED), 1-1/2 X 2 X 11 GA. STK
PRT	1	7	BODY BOTTOM PANEL, 10 GA.
PRT	4	8	BODY BUMPER, 1 X 1 X .063 STK
PRT	2	9	BODY MIDDLE LIFT CLIP, 3/8 X 1 STK
PRT	4	10	BODY CORNER LIFT CLIP, 3/8 X 1 STK
PRT	4	11	PIPE COUPLING, RECESSED TAPER-TAPPED, \varnothing 3/4 NPT
PRT	42	12	RIVET
ASM	1	13	GASKET, $\frac{1}{2}$ X 1-1/2 STK
ASM	1	14	LID ASSEMBLY
PRT	1	15	LID FRAME BAR ASSEMBLY
PRT	2	16	LID FRAME BAR (STRAIGHT), $\frac{1}{2}$ X 1-3/4 STK
PRT	2	17	LID FRAME BAR (FORMED), $\frac{1}{2}$ X 1-3/4 STK
PRT	1	18	LID PANEL, 10 GA.
PRT	1	19	LID LIFT NUT \varnothing 1-1/4 STK
PRT	1	20	PLUG, \varnothing 1/4
PRT	42	21	SOC, FLAT HD C'SUNK CAP SCREW, \varnothing 1/2 - 13UNC X 1-3/4
PRT	4	22	PIPE PLUG, \varnothing 3/4, SOC, NPTF OR PTF, COMMERCIAL QUALITY
BLK	AR	23	SEAM SEALER, COMMERCIAL QUALITY

NOMINAL TARE WEIGH: 635 LB.

MAXIMUM GROSS WEIGHT: 4,000 LB.

